

Franklin County Public Safety
Spinal Motion Restriction Evaluation (SMORE)

B	E	I	P	
O	O	S	S	A. History/Mechanism Of Injury (MOI):¹ 1. Axial Load (Diving) 2. Blunt Trauma a. Vehicular Crash b. Fall > 3 feet c. Adult fall from standing 3. High Velocity (ejection) <i>ALERTS PROVIDER TO PERFORM SMORE!</i> <i>DOES NOT NECESSITATE Spinal Motion Restriction (SMR)</i>
O	O	S	S	B. Reliability of Patient:² 1. Unreliable: apply Spinal Motion Restrictions 2. Reliable: do not apply SMR
O	O	S	S	C. Distracting Injury?³ 1. Present: apply SMR 2. Not Present: no SMR
O	O	S	S	D. Subjective Pain (Ask)⁴ 1. YES: apply SMR 2. NO: do not apply SMR
O	O	S	S	E. Objective Pain (Touch)⁵ 1. Yes: apply SMR 2. NO: do not apply SMR
O	O	S	S	F. Neurological Exam⁶ 1. Abnormal: apply SMR 2. Normal: do not apply SMR
O	O	S	S	G. Movement Pain (patient moves)⁷ 1. Yes: apply SMR 2. NO: do not apply SMR
O	O	S	S	H. Mystic or SNR rule⁸ 1. Something's Not Right or Something tells you to: Apply SMR

Notes:

1. MOI component is presented to remind the provider of situations where SMR may need to be applied. It does not mandate SMR, but should trigger the need to perform a careful assessment for injury and the need to provide spinal motion restriction.

2. The patient must be assessed for reliability. His or her ability to give you the information you need to determine whether or not to apply SMR.

a. Patient must be Alert, Sober, Calm and Cooperative (ASC²)

b. Must be able to communicate

1) Age > 8

2) English speaking or can competently interpret

3) Dementia/Mental Retardation

c. Altered Mental Status

1) Head injury, +LOC

2) Intoxication-alcohol, drugs

3) Acute stress reaction

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3. Distracting injury includes any injury that produces clinically apparent pain that might distract the patient from the pain of a spine injury. This would include significant head, chest, back, abdomen/pelvic or extremity pain. This would not include minor extremity lacerations, contusions or sprains.
4. Subjective pain is determined by simply asking the "Reliable" patient if their neck or back hurts. If they report any pain in the spine then you will provide spinal motion restriction.
5. Objective pain is determined by careful examination of the spine, exposing if possible and at a minimum, palpating the whole spine. Sometimes patients who are distracted or intoxicated will only notice an injury until you palpate and find the area of injury.
6. Objective motor and sensory exams of the extremities should be performed as usual. A positive **Neurological** exam will also include evidence of bowel or bladder incontinence, subjective numbness and tingling described by the "Reliable" patient. This would include transient symptoms that are now absent. It is possible to have spinal cord injury without bone injury, especially in children.
7. Once you have worked through a negative **SMORE** to this point, ask the patient to put their neck through a normal range of motion (ROM). Normal ROM of the neck includes chin-to-chest, chin-to-sky, ear to shoulders and circular rotation. If no subjective pain is reported during these movements then your spinal motion restriction evaluation (SMORE) is complete.
8. Restraining a patient to a long spine board, placing a c-collar, blocking their head and taping them down is an uncomfortable process that causes discomfort and can worsen the medical status of some patients, especially the elderly. With the average length of time patients stay on a long spine board in the hospital ED, many will have symptoms related to just the SMR up to several weeks. Therefore unnecessary SMR is harmful. **However, if the SMORE is negative and you have concerns about this particular patient, the MOI or the situation is worrisome, or the little voice is speaking to you, then go ahead and perform SMR.** Intuition in the experienced provider is an important consideration.

Performance Improvement Markers

- A. Documentation
 1. Document performance of SMORE if indicated by MOI. Or, document why SMORE not indicated and performed.
 2. Specific reason for SMR, i.e. MOI and Altered Mental Status from admitted alcohol consumption, or MOI and numbness and tingling left arm hand.
- B. Comparison, ED diagnosis and pre-hospital assessment.

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